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MapInfoOffline

30

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

1 10 Next

**Reciprocating engine with a wobble plate transmission**  
 Inventor Name: Frey, Michael; Obrist, Frank; Kuhn, Peter  
 Application Date: 04/23/1997 • Issue Date: 07/21/1998  
 U.S. Class: 123/056 300 • Int. Class: F02B 017/26  
 Claims: 5 • Ind. Claims: 1 • Cited Patents: 9 • Citing Patents: 0  
 1st Cl. Terms: 44 • Ex Cl. Terms: 44 • 1st Cl. Elements: 0 • Ex Cl. Elements: 0  
 Full Patent • Cited References • Citing Patents • Abstract • Claims • Image

**Hydraulic cylinder sealing structure**  
 Inventor Name: Huang, Zhen; Schmidt, Klaus; Scheerer, Hans; Opara, Andreas  
 Application Date: 12/14/1994 • Issue Date: 07/30/1996  
 U.S. Class: 188/322 160 • Int. Class: B60G 017/08; B60  
 Claims: 9 • Ind. Claims: 3 • Cited Patents: 3 • Citing Patents: 1  
 1st Cl. Terms: 49 • Ex Cl. Terms: 49 • 1st Cl. Elements: 5 • Ex Cl. Elements: 5  
 Full Patent • Cited References • Citing Patents • Abstract • Claims • Image

**Controllable vibration damper for motor vehicles**  
 Inventor Name: Huang, Zhen; Betsch, Hans J.; Scheerer, Hans; Opara, Andreas; Schulz, Walter; Schmidt, Klaus  
 Application Date: 12/09/1993 • Issue Date: 12/27/1994  
 U.S. Class: 188/266 600 • Int. Class: F16F 009/46  
 Claims: 31 • Ind. Claims: 2 • Cited Patents: 5 • Citing Patents: 5  
 1st Cl. Terms: 56 • Ex Cl. Terms: 56 • 1st Cl. Elements: 7 • Ex Cl. Elements: 7  
 Full Patent • Cited References • Citing Patents • Abstract • Claims • Image

**Adjustable strut for motor vehicles**  
 Inventor Name: Huang, Zhen; Busch, Werner; Nagel, Gunter  
 Application Date: 07/25/1996 • Issue Date: 10/20/1998  
 U.S. Class: 267/221 • Int. Class: B60G 017/027  
 Claims: 16 • Ind. Claims: 1 • Cited Patents: 1 • Citing Patents: 0  
 1st Cl. Terms: 50 • Ex Cl. Terms: 50 • 1st Cl. Elements: 11 • Ex Cl. Elements: 11  
 Full Patent • Cited References • Citing Patents • Abstract • Claims • Image

**Safety belt reeling device with comfort function**  
 Inventor Name: Jahn, Walter; Axelsson, Lars; Fugel, Frank

US 5,782,219  
 Audi Aktiengesellschaft  
 Bayerische Motoren Werke  
 Aktiengesellschaft  
 Mercedes-Benz  
 Aktiengesellschaft

US 5,540,300  
 August Bülstein GmbH & Co  
 KG, Mercedes-Benz AG

US 5,375,683  
 August Bülstein GmbH & Co  
 KG, Mercedes-Benz AG

US 5,823,517  
 August Bülstein GmbH  
 Mercedes-Benz AG

JavaScript:top.location.replace("mailto:ASSIGN@EEI")

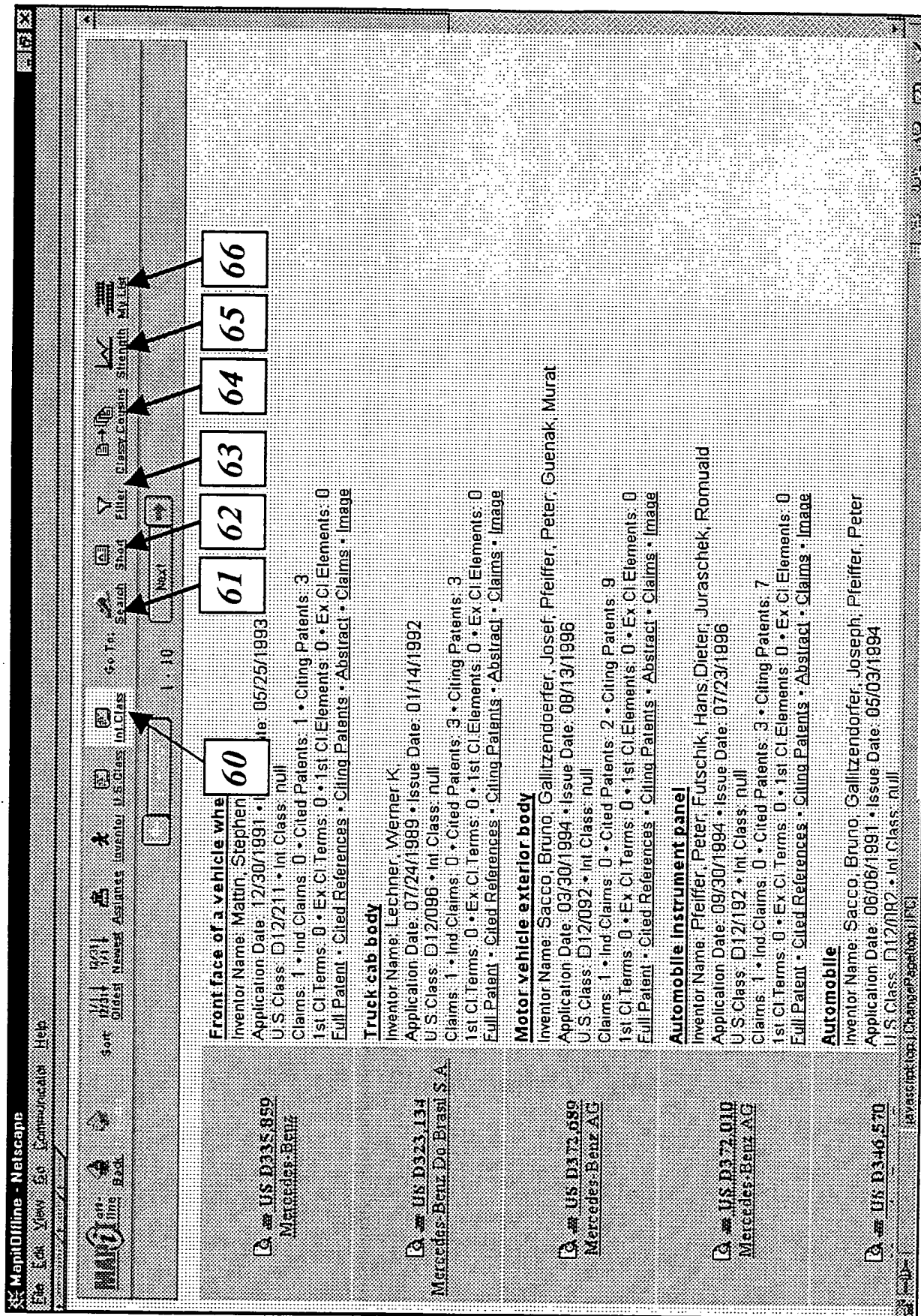
Figure 3





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<input type="checkbox"/> US 5,743,553 <u>Mercedes-Benz AG</u>		<input checked="" type="checkbox"/> 50		<input type="text"/> 1 - 10		<input type="button" value="Next"/>	
		<b>Active suspension system</b> Inventor Name: Nagel, Guenter; Winkler, Martin Application Date: 04/24/1995 • Issue Date: 04/28/1998 U.S. Class: 001/001 • Int. Class: B60G 01/126 Claims: 9 • Ind. Claims: 1 • Cited Patents: 3 • Citing Patents: 0 1st Cl. Terms: 41 • Ex. Cl. Terms: 41 • 1st Cl. Elements: 3 • Ex. Cl. Elements: 3 Full Patent • Cited References • Citing Patents • Abstract • Claims • Image					
		<b>Combination bathroom stool and toilet</b> Inventor Name: Merchan, Mercedes A. Application Date: 03/15/1978 • Issue Date: 07/24/1979 U.S. Class: 004/476 • Int. Class: A47K 01/02, A61 Claims: 5 • Ind. Claims: 1 • Cited Patents: 9 • Citing Patents: 2 1st Cl. Terms: 70 • Ex. Cl. Terms: 70 • 1st Cl. Elements: 0 • Ex. Cl. Elements: 0 Full Patent • Cited References • Citing Patents • Abstract • Claims • Image					
		<b>Headlamp cleaning unit for the front area of a motor vehicle</b> Inventor Name: Frey, Wolfram; Truber, Hans Application Date: 11/27/1991 • Issue Date: 08/16/1994 U.S. Class: 015/250, 002 • Int. Class: B60S 001/18, B60 Claims: 4 • Ind. Claims: 1 • Cited Patents: 2 • Citing Patents: 0 1st Cl. Terms: 49 • Ex. Cl. Terms: 49 • 1st Cl. Elements: 4 • Ex. Cl. Elements: 4 Full Patent • Cited References • Citing Patents • Abstract • Claims • Image					
		<b>Windshield wiper for a window with a constant radius of curvature</b> Inventor Name: Siegel, Gunter; Ott, Alfred; Kelz, Michael Application Date: 11/30/1995 • Issue Date: 10/13/1998 U.S. Class: 015/260, 351 • Int. Class: B60S 001/32 Claims: 1 • Ind. Claims: 1 • Cited Patents: 7 • Citing Patents: 0 1st Cl. Terms: 45 • Ex. Cl. Terms: 45 • 1st Cl. Elements: 0 • Ex. Cl. Elements: 0 Full Patent • Cited References • Citing Patents • Abstract • Claims • Image					
		<b>Support bearing with retainer</b> Inventor Name: Konig, Werner Application Date: 03/25/1991 • Issue Date: 04/14/1992 U.S. Class: 016/002, 100 • Int. Class: B65D 055/00, B62					
<input checked="" type="checkbox"/> US 5,317,439 <u>Mercedes-Benz AG</u>							
<input checked="" type="checkbox"/> US 5,819,363 <u>Mercedes-Benz AG</u>							
<input checked="" type="checkbox"/> US 5,103,529 <u>Mercedes-Benz AG</u>							

**Figure 5**



**Figure 6**

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1st Cl Terms: 0 • Ex Cl Terms: 0 • Cited Patents: 0 • Abstract • Claims • Image

**Front face of a vehicle wheel**

Inventor Name: Gallitzendorfer, Josef  
 Application Date: 04/06/1990 • Issue Date: 06/30/1992  
 U.S. Class: D12/211 • Int. Class: null  
 Claims: 1 • Ind. Claims: 0 • Cited Patents: 2 • Citing Patents: 0  
 1st Cl Terms: 0 • Ex Cl Terms: 0 • 1st Cl Elements: 0 • Ex Cl Elements: 0  
 Full Patent • Cited References • Citing Patents • Abstract • Claims • Image

**Front face of a vehicle instrument panel**

Inventor Name: Sacco, Bruno; Gallitzendorfer, Josef; Pfeiffer, Peter; Juraschek, Romuald  
 Application Date: 08/26/1994 • Issue Date: 05/21/1996  
 U.S. Class: D12/192 • Int. Class: null  
 Claims: 1 • Ind. Claims: 0 • Cited Patents: 3 • Citing Patents: 5  
 1st Cl Terms: 0 • Ex Cl Terms: 0 • 1st Cl Elements: 0 • Ex Cl Elements: 0  
 Full Patent • Cited References • Citing Patents • Abstract • Claims • Image

**Rear light of an automobile**

Inventor Name: Sacco, Bruno; Gallitzendorfer, Josef; Pfeiffer, Peter  
 Application Date: 08/25/1993 • Issue Date: 11/14/1995  
 U.S. Class: D26/028 • Int. Class: null  
 Claims: 1 • Ind. Claims: 0 • Cited Patents: 5 • Citing Patents: 4  
 1st Cl Terms: 0 • Ex Cl Terms: 0 • 1st Cl Elements: 0 • Ex Cl Elements: 0  
 Full Patent • Cited References • Citing Patents • Abstract • Claims • Image

**Automobile**

Inventor Name: Sacco, Bruno; Gallitzendorfer, Josef  
 Application Date: 08/18/1994 • Issue Date: 04/04/1996  
 U.S. Class: D12/092 • Int. Class: null  
 Claims: 1 • Ind. Claims: 0 • Cited Patents: 1 • Citing Patents: 0  
 1st Cl Terms: 0 • Ex Cl Terms: 0 • 1st Cl Elements: 0 • Ex Cl Elements: 0  
 Full Patent • Cited References • Citing Patents • Abstract • Claims • Image

PatentNumber: 70  
 Assignee: Mercedes-Benz AG  
 Title: [REDACTED]  
 Class: [REDACTED]  
 USSubClass: [REDACTED]  
 IPC: [REDACTED]  
 PatentReferences: [REDACTED]  
 PatentCitations: [REDACTED]  
 Abstract: [REDACTED]  
 Claims: [REDACTED]  
 ApplicationDate: [REDACTED]  
 IssueDate: [REDACTED]  
 Title: [REDACTED]

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Figure 7



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1st Cl Terms: 0 • Ex Cl Terms: 0 • Int Cl Terms: 0 • Ex Cl Elements: 0  
 Full Patent • Cited References • Citing Patents • Abstract • Claims • Image

**Front face of a vehicle wheel**

Inventor Name: Gallitzendoerfer, Josef  
 Application Date: 04/06/1990 • Issue Date: 06/30/1992  
 U.S. Class: D12/211 • Int. Class: null  
 Claims: 1 • Ind. Claims: 0 • Cited Patents: 2 • Citing Patents: 0  
 1st Cl Terms: 0 • Ex Cl Terms: 0 • 1st Cl Elements: 0 • Ex Cl Elements: 0  
 Full Patent • Cited References • Citing Patents • Abstract • Claims • Image

**Front face of a vehicle instrument panel**

Inventor Name: Sacco, Bruno; Gallitzendoerfer, Josef; Pfeiffer, Peter; Juraschek, Romuald  
 Application Date: 08/26/1994 • Issue Date: 05/21/1996  
 U.S. Class: D12/192 • Int. Class: null  
 Claims: 1 • Ind. Claims: 0 • Cited Patents: 3 • Citing Patents: 5  
 1st Cl Terms: 0 • Ex Cl Terms: 0 • 1st Cl Elements: 0 • Ex Cl Elements: 0  
 Full Patent • Cited References • Citing Patents • Abstract • Claims • Image

**Rear light of an automobile**

Inventor Name: Sacco, Bruno; Gallitzendoerfer, Josef; Pfeiffer, Peter  
 Application Date: 08/25/1993 • Issue Date: 11/14/1995  
 U.S. Class: D26/026 • Int. Class: null  
 Claims: 1 • Ind. Claims: 0 • Cited Patents: 5 • Citing Patents: 4  
 1st Cl Terms: 0 • Ex Cl Terms: 0 • 1st Cl Elements: 0 • Ex Cl Elements: 0  
 Full Patent • Cited References • Citing Patents • Abstract • Claims • Image

**Automobile**

Inventor Name: Sacco, Bruno; Gallitzendoerfer, Josef; Pfeiffer, Peter  
 Application Date: 08/18/1994 • Issue Date: 04/02/1996  
 U.S. Class: D12/092 • Int. Class: null  
 Claims: 1 • Ind. Claims: 0 • Cited Patents: 1 • Citing Patents: 7  
 1st Cl Terms: 0 • Ex Cl Terms: 0 • 1st Cl Elements: 0 • Ex Cl Elements: 0  
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Patents per page: 10 • View Patent • Date Format: 01/31/1999  
 Instrument panel: Title Search! Filter On

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Figure 8



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1970	1972	1974	1976	1978	1980	1982	1984	1986	1988	1990	1992	1994	1996	1998

1 - 10 Next

Current Filter Title = instrument panel

**US 5,487,558**  
**Mercedes-Benz AG**

**Instrument panel in a motor vehicle**  
Inventor Name: Ball, Johannes; Henseler, Wolfgang; Gerstenberg, Uwe; Fischer, Thomas  
Application Date: 09/29/1994 • Issue Date: 01/30/1996  
U.S. Class: 280/728, 300 • Int. Class: B60R 02/16  
Claims: 6 • Ind. Claims: 2 • Cited Patents: 1 • Citing Patents: 6  
1st Cl. Terms: 38 • Ex. Cl. Terms: 38 • 1st Cl. Elements: 0 • Ex. Cl. Elements: 0  
Full Patent • Cited References • Citing Patents • Abstract • Claims • Image

**US D362,990**  
**Mercedes-Benz AG**

**Front face of a vehicle instrument panel**  
Inventor Name: Sacco, Bruno; Gallitzendörfer, Josef; Pfeiffer, Peter; Juraschek, Romuald  
Application Date: 08/26/1994 • Issue Date: 05/21/1996  
U.S. Class: D12/192 • Int. Class: null  
Claims: 1 • Ind. Claims: 1 • Cited Patents: 0 • Ex. Cl. Terms: 0 • 1st Cl. Elements: 0 • Ex. Cl. Elements: 0  
Full Patent • Cited References • Citing Patents • Abstract • Claims • Image

**US 5,524,913**  
**Mercedes-Benz AG**

**Instrument panel for a motor vehicle**  
Inventor Name: Henseler, Wolfgang  
Application Date: 09/29/1994 • Issue Date: 06/11/1996  
U.S. Class: 280/728, 300 • Int. Class: B60R 02/22, B60  
Claims: 16 • Ind. Claims: 1 • Cited Patents: 4 • Citing Patents: 1  
1st Cl. Terms: 57 • Ex. Cl. Terms: 57 • 1st Cl. Elements: 1 • Ex. Cl. Elements: 1  
Full Patent • Cited References • Citing Patents • Abstract • Claims • Image

**US D373,010**  
**Mercedes-Benz AG**

**Automobile instrument panel**  
Inventor Name: Pfeiffer, Peter; Futschik, Hans; Dieter, Juraschek, Romuald  
Application Date: 09/30/1994 • Issue Date: 07/23/1996  
U.S. Class: D12/192 • Int. Class: null  
Claims: 1 • Ind. Claims: 0 • Cited Patents: 3 • Citing Patents: 7  
1st Cl. Terms: 0 • Ex. Cl. Terms: 0 • 1st Cl. Elements: 0 • Ex. Cl. Elements: 0  
Full Patent • Cited References • Citing Patents • Abstract • Claims • Image

Document Date

Figure 9



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# United States Patent

Ball et al.

5,487,558  
01/30/1996

## Instrument panel in a motor vehicle

*Inventors:* Ball, Johannes; Henseler, Wolfgang; Gerstenberg, Uwe; Fischer, Thomas

*Assignee:* Mercedes-Benz AG

*Date Filed:* 09/29/1994

*International Class:* B60R 021/16

*U.S. Class:* 280/738 300

### Abstract

The instrument panel in a motor vehicle exhibits an interior rigid reinforcement panel, a foamed-plastic layer located thereabove and an outer skin which covers said layer. A cover which likewise exhibits this construction is integrated into the instrument panel in front of an airbag unit, which cover, in the event of a crash, can move away and releases an opening through which an airbag can unfold out of its receiving container behind the instrument panel. The reinforcement portion of the cover is a separated-off part of the adjoining reinforcement-panel surface. The process for producing an instrument panel of this type is carried out such that, before or after foaming of the entire reinforcement panel, the opening cover is separated from said panel.

### Claims

What is claimed is

#### 1. Instrument panel arrangement in a motor vehicle comprising:

- an interior rigid reinforcement panel,
- a foamed-plastic layer located above the reinforcement panel,
- an outer skin which covers said foamed-plastic layer,
- a cover section integrated into the instrument panel for covering an airbag unit, said

Figure 10

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4. Process according to claim 2, wherein said separating is done prior to applying the foamed-plastic layer.

5. Process according to claim 3, comprising releasably connecting the rigid reinforcement panel of the cover section adjacent rigid reinforcement panel structure during application of foam to form the foamed-plastic layer.

6. Process according to claim 2, wherein said separating is done after applying the foamed-plastic layer.

### References Cited

#### U.S. PATENT DOCUMENTS

Number	Issue Date	Inventor	U.S. Class	Title
5,035,444				

#### Citing Patents

#### U.S. PATENT DOCUMENTS

Number	Issue Date	Inventor	U.S. Class	Title
5,826,938				
5,641,177				
5,810,388				
5,871,229				
5,779,262				
5,590,903				

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Figure 11

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4. Process according to claim 2, wherein said separating is done prior to applying the foamed-plastic layer.

5. Process according to claim 3, comprising releasably connecting the rigid reinforcement panel of the cover section adjacent rigid reinforcement panel structure during application of foam to form the foamed-plastic layer.

6. Process according to claim 2, wherein said separating is done after applying the foamed-plastic layer.

References Cited

U.S. PATENT DOCUMENTS

Number	Issue Date	Inventor	U.S. Class	Title
5,035,444				

Citing Patents

U.S. PATENT DOCUMENTS

Number	Issue Date	Inventor	U.S. Class	Title
5,826,938				
5,641,177				
5,810,389				
5,871,239				
5,779,262				
5,590,903				

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Document Date

Figure 12



## Abstract

The instrument panel in a motor vehicle exhibits an interior, rigid reinforcement panel, a foamed-plastic layer located thereabove and an outer skin which covers said layer. A cover which likewise exhibits this construction is integrated into the instrument panel in front of an airbag unit, which cover, in the event of a crash, can move away and releases an opening through which an airbag can unfold out of its receiving container behind the instrument panel. The reinforcement portion of the cover is a separated-off part of the adjoining reinforcement-panel surface. The process for producing an instrument panel of this type is carried out such that, before or after foaming of the entire reinforcement panel, the opening cover is separated from said panel.

## Claims

What is claimed is:

### 1. Instrument panel arrangement in a motor vehicle comprising:

- an interior rigid reinforcement panel,
- a foamed-plastic layer located above the reinforcement panel,
- an outer skin which covers said foamed-plastic layer,
- a cover section integrated into the instrument panel for covering an airbag unit, said cover section exhibiting a similar reinforcement panel, foamed-plastic layer, and outer skin as the adjacent instrument panel arrangement,

wherein the cover section is configured to move away and release an opening through which an airbag can unfold out of a receiving container of the airbag unit behind the instrument panel; and

wherein the similar reinforcement panel of the cover section is an adjoining part of said reinforcement panel separated from said reinforcement panel via cuts formed at an angle other than perpendicular to a plane of the reinforcement panel.

### 2. Process for producing an instrument panel arrangement in a motor vehicle comprising

- an interior rigid reinforcement panel,
- a foamed-plastic layer located above the reinforcement panel,
- an outer skin which covers said foamed-plastic layer,

Figure 13

## Claims

What is claimed is

### 1. Instrument panel arrangement in a motor vehicle comprising:

- an interior rigid reinforcement panel,
- a foamed-plastic layer located above the reinforcement panel,
- an outer skin which covers said foamed-plastic layer,
- a cover section integrated into the instrument panel for covering an airbag unit, said cover section exhibiting a similar reinforcement panel, foamed-plastic layer, and outer skin as the adjacent instrument panel arrangement,
- wherein the cover section is configured to move away and release an opening through which an airbag can unfold out of a receiving container of the airbag unit behind the instrument panel, and
- wherein the similar reinforcement panel of the cover section is an adjoining part of said reinforcement panel separated from said reinforcement panel via cuts formed at an angle other than perpendicular to a plane of the reinforcement panel.

### 2. Process for producing an instrument panel arrangement in a motor vehicle comprising:

- an interior rigid reinforcement panel,
- a foamed-plastic layer located above the reinforcement panel,
- an outer skin which covers said foamed-plastic layer,
- a cover section integrated into the instrument panel for covering an airbag unit, said cover section exhibiting a similar reinforcement panel foamed-plastic layer and outer skin as the adjacent instrument panel structure,
- wherein the cover section is configured to move away and release an opening through which an airbag can unfold out of a receiving container of the airbag unit behind the instrument panel, and
- wherein the rigid reinforcement panel of the cover is a separated-off part of adjoining rigid reinforcement panel structure.

U.S. PATENT DOCUMENTS

5,035,414 7/1991 Carter 280/728.3

FOREIGN PATENT DOCUMENTS

465969 1/1992 European Pat. Off.

that, before or after foaming of the entire reinforcement panel, the opening cover is separated from said panel.

6 Claims, 1 Drawing Sheet

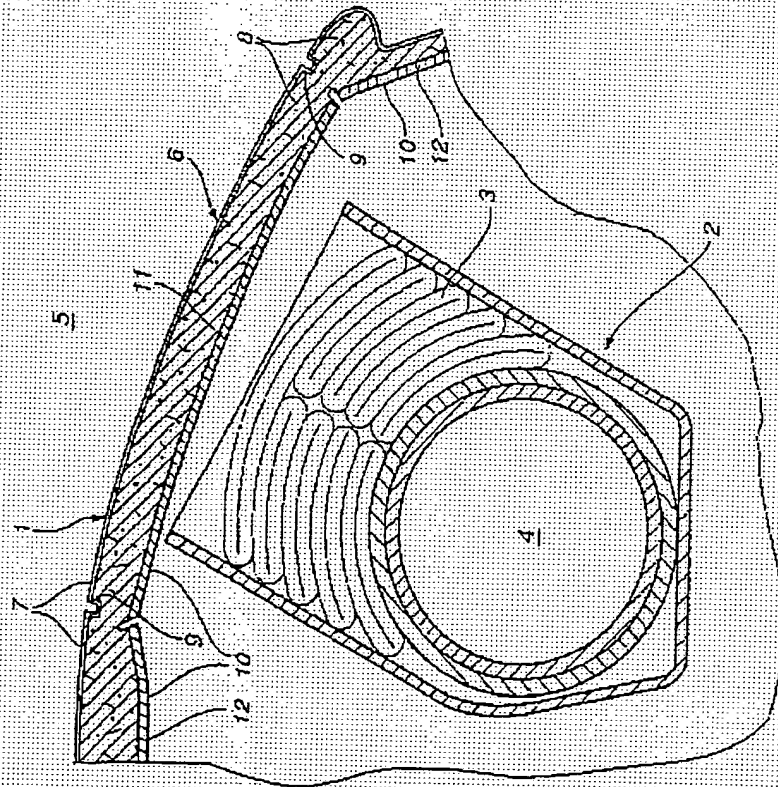


Figure 15

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**Figure 16**



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Find Previous  
Find All  
Find First  
Find Last

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Search  
Long  
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**81**

**63**

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U.S. Class			Assignees			International Patent			
US Classes									
001	004	015	016	029	049	055	060		
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236	237	239	242	248	251	264	267		
279	280	285	292	293	296	297	303		
307	315	318	320	322	324	340	341		
342	343	345	359	361	362	364	367		
371	374	375	380	381	384	395	403		
411	414	415	417	418	420	423	427		
428	429	439	454	455	464	474	475		
477	502	521	701	702	D06	D12	D26		

### Patent Assignees

- Audi Aktiengesellschaft, Bayerische Motoren Werke Aktiengesellschaft, Mercedes-Benz Aktiengesellschaft
- August Bülstein GmbH & Co KG, Mercedes-Benz AG
- August Bülstein GmbH & Co. KG, Mercedes-Benz AG
- August Bülstein GmbH, Mercedes-Benz AG
- Autoliv Development AB, Mercedes-Benz AG
- Bayerische Motoren Werke Aktiengesellschaft, Mercedes-Benz Aktiengesellschaft
- Behr GmbH & Co., Mercedes-Benz Aktiengesellschaft
- Bomoro Bocklenberg & Motte GmbH & Co. KG, Mercedes-Benz AG
- Doduco GmbH & Co., Mercedes-Benz Aktiengesellschaft
- Emitec Gesellschaft fuer Emissions-technologie mbH, Mercedes-Benz Aktiengesellschaft

**Figure 17**

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1970 1972 1974 1976 1978 1980 1982 1984 1986 1988 1990 1992 1994 1996 1998

1 10 Next

US 5,143,553  
Meredith Bank AG

**Active suspension system**  
Inventor Name: Nagel, Guenter; Winkler, Martin  
Application Date: 04/24/1995 • Issue Date: 04/28/1998  
U.S. Class: 001/001 • Int. Class: B60G 01/28  
Claims: 9 • Ind. Claims: 1 • Cited Patents: 3 • Citing Patents: 0  
1st Cl. Terms: 41 • Ex. Cl. Terms: 41 • 1st Cl. Elements: 3 • Ex. Cl. Elements: 3  
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Figure 18



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MAPiOffline

Set User Strength Coefficients

1.0 \* [Number of Claims] +

4.0 \* [Number of Independent Claims] +

8.0 \* [Number of Citations] +

0.1 \* [Number of First Claim Terms] +

0.1 \* [Number of Exemplary Claim Terms] +

0.1 \* [Number of First Claim Elements] +

0.1 \* [Number of Exemplary Claim Elements]

1 3 4 8 -1 -1 -1 -1

Set User Strength Coefficients

1 3 4 8 -1 -1 -1 -1

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Patent Number	Title	Mapit Str.	User Str.	Total Claims	Indep. Claims	Cits	1st Cl. Terms	Ex. Cl. Terms	1st Cl. Elements	Ex. Cl. Elements
US 5,341,297	Apparatus and method for preventing instabilities in vehicle handling	326	282	19	3	38	46	46	1	1
US 5,471,388	Method and apparatus for preventing vehicle handling instabilities	146	61	14	2	17	63	63	1	1
US 5,345,385	Method for detecting driving situation with respect to vehicle yaw behavior	136	81	12	1	16	44	44	1	1
US 5,315,933	Device for recognizing a child's seat which is strapped to the front passenger's seat of a motor vehicle	132	89	16	3	14	38	38	41	41

65

Figure 20







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1/1 1/1 1/1  
Go To: Search Sheet Edit Class Counts Standard My List

1 - 10 next

65

Set User Strength Coefficients

Definition of Mapit Strength:

1.0 \* [Number of Claims] +  
4.0 \* [Number of Independent Claims] +  
8.0 \* [Number of Citations] +  
-0.1 \* [Number of First Claim Terms] +  
-0.1 \* [Number of Exemplary Claim Terms] +  
-0.1 \* [Number of First Claim Elements] +  
-0.1 \* [Number of Exemplary Claim Elements]

Set User Strength Coefficients

1 +  
0 \* [Number of Claims] +  
5 \* [Number of Independent Claims] +  
8 \* [Number of Citations] +  
-2 \* [Number of 1st Claim Terms] +  
-2 \* [Number of Exemplary Claim Terms] +  
-4 \* [Number of 1st Claim Elements] +  
-4 \* [Number of Exemplary Claim Terms]

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Patent Number	Title	Mapit Str.	User Str.	Total Claims	Indep. Claims	Cits	1st Cl. Terms	Ex. Cl. Terms	1st Cl. Elements	Ex. Cl. Elements
US 5,884,724	Steering system for a non-track vehicle	54	-85	20	10	0	34	34	1	1
US 5,753,116	Coolant filter	42	-88	20	7	0	31	31	1	1
US 5,831,154	Process for determining a liquid quantity, particularly an engine oil quantity in a motor vehicle	37	-132	16	7	0	36	36	31	31
US 5,871,062	Method and device for speed and distance control for a motor vehicle	25	-133	8	6	0	37	37	21	21
US 5,704,386	Multi-stage ramp/lane value	23	-233	10	6	0	52	52	71	71

Mapit Offline  
Back Forward Stop Reload Home Search  
Go To: Search Sheet Edit Class Counts Standard My List

Figure 23



**MapitOffline - Netscape**

File Edit View Go Communications Help

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**MAPIT**

Sort Oldest Newest Ascending Descending U.S. Class Int.Cl. Class

1-10 Next

**65**

Definition of Mapit Strength:	Set User Strength Coefficient:
1.0 + [Number of Claims] +	1 + * [Number of Claims] +
-4.0 * [Number of Independent Claims] +	* [Number of Independent Claims] +
8.0 * [Number of Citations] +	* [Number of Citations] +
-0.1 * [Number of First Claim Terms] +	* [Number of 1st Claim Terms] +
-0.1 * [Number of Exemplary Claim Terms] +	* [Number of Exemplary Claim Terms] +
-0.1 * [Number of First Claim Elements] +	* [Number of 1st Claim Elements] +
-0.1 * [Number of Exemplary Claim Elements]	* [Number of Exemplary Claim Terms]

Calculate

Caution: this takes about 1.5 minutes per 1000 patents

Patent Number	Title	Mapit Str.	Total Claims	Indep. Claims	Cits	1st Cl. Terms	Ex. Cl. Terms	1st Cl. Elements	Ex. Cl. Elements
US 5,341,297	Apparatus and method for preventing instabilities in vehicle handling	326	19	3	38	46	46	1	1
US 5,471,388	Method and apparatus for preventing vehicle handling instabilities	146	14	2	17	63	63	1	1
US 5,345,185	Method for detecting driving situation with respect to vehicle yaw behavior	136	12	1	16	44	44	1	1
US 5,515,933	Device for recognizing a child's seat which is strapped to the front passenger's seat of a motor vehicle	132	16	3	14	38	38	41	41

Advanced Patent Classification Search Results

Classification Change Request (CPC) STRENGTH Num Of Citations Desc?

**Figure 24**



Caution: this takes about 1.5 minutes per 1000 patents.

**Figure 25**

MapitOffline - Netscape
File Edit View Go Database Help
3000/2000/1000
Mapit Offline Assistant Invention Database
Back
Go To Search Filter Class Counts Standby Mailer
1-10
Next
65

### Definition of Mapit Strength

$1.0 + [\text{Number of Claims}] +$   
 $4.0 * [\text{Number of Independent Claims}] +$   
 $8.0 * [\text{Number of Citations}] +$   
 $-0.1 * [\text{Number of First Claim Terms}] +$   
 $-0.1 * [\text{Number of Exemplary Claim Terms}] +$   
 $-0.1 * [\text{Number of First Claim Elements}] +$   
 $-0.1 * [\text{Number of Exemplary Claim Elements}]$

### Set User Strength Coefficients

\* [Number of Claims] +  
 \* [Number of Independent Claims] +  
 \* [Number of Citations] +  
 \* [Number of First Claim Terms] +  
 \* [Number of Exemplary Claim Terms] +  
 \* [Number of First Claim Elements] +  
 \* [Number of Exemplary Claim Terms] +  
 \* [Number of Exemplary Claim Elements]

Calculate

Caution: this takes about 1.5 minutes per 1000 patents.

Patent Number	Title	Mapit Str.	User Str.	Total Claims	Indep. Claims	Cits	1st Cl. Terms	Ex-Cl. Terms	1st Cl. Elements	Ex-Cl. Elements
US 5,894,010	Optimized gray cast iron plate alloy for utility vehicle brake disks	29	-62	12	5	0	12	12	51	51
US 5,500,262	Weeping hose	6	-54	4	1	0	15	15	1	1
US 5,838,251	Method and device for programming operating data into vehicle components	33	-63	20	4	0	17	17	21	21
US 5,662,540	Tensioning device for a chain of an internal combustion engine	20	-73	15	2	0	17	17	21	21

Document Done

Figure 26

MapInfo - Netscape  
File Edit View Go Communicate Help

1/1 12/31 1/1 1/1  
Sort Oldest Newest Ascending Descending Int Class  
Back Forward Home Stop Search Short Filter Class Count Length Max Len

1 10 Next

65

**Definition of Mapit Strength**

1.0 + [Number of Claims] +  
4.0 \* [Number of Independent Claims] +  
8.0 \* [Number of Citations] +  
-0.1 \* [Number of First Claim Terms] +  
-0.1 \* [Number of Exemplary Claim Terms] +  
-0.1 \* [Number of First Claim Elements] +  
-0.1 \* [Number of Exemplary Claim Elements]

**Set User Strength Coefficients**

1 +  
0 \* [Number of Claims] +  
5 \* [Number of Independent Claims] +  
8 \* [Number of Citations] +  
-2 \* [Number of 1st Claim Terms] +  
-2 \* [Number of Exemplary Claim Terms] +  
-4 \* [Number of 1st Claim Elements] +  
-4 \* [Number of Exemplary Claim Terms]

Calculate

Caution: this takes about 1.5 minutes per 1000 patents

Patent Number	Title	Mapit Str.	User Str.	Total Claims	Indem. Claims	Cits	1st Cl. Terms	Ex-Cl. Terms	1st Cl. Elements	Ex-Cl. Elements
US 5,611,572	Arrangement of solenoid valves, a central plug and a printed circuit board on a control housing of an automatic shift device of a toothed-wheel variable-speed gearbox	42	-185	20	2	3	55	55	1	1
US 5,592,070	Process for determination of friction/slip characteristics of the tires of a road vehicle and slip control system for carrying out the process	-4	-378	10	1	0	96	96	1	1
US 5,601,057	Valve actuating system for a multicylinder internal combustion engine	8	-166	12	1	0	43	43	1	1

MapInfo Change Session Strength File Name (A-Sort Terms Asc)

Figure 27



**MapInfo - Netscape**

File Edit View Go Communicator Help

MAPINFO  
Back

for: [http://www.mapinfo.com] [http://www.mapinfo.com]  
Client: Newer Assistant Inventor U.S. Class IndClass

[Search] [Short] [Error] [Class] [Claims] [Standards] [Miles]

1-10 [Next] [Previous]

**65**

Definition of Mapit Strength		Set User Strength Coefficients	
1.0 + [Number of Claims] +	* [Number of Claims] +	1	*
4.0 * [Number of Independent Claims] +	* [Number of Independent Claims] +	0	*
8.0 * [Number of Citations] +	* [Number of Citations] +	5	*
-0.1 * [Number of First Claim Terms] +	* [Number of 1st Claim Terms] +	8	*
-0.1 * [Number of Exemplary Claim Terms] +	* [Number of Exemplary Chain Terms] +	-2	*
-0.1 * [Number of First Claim Elements] +	* [Number of 1st Claim Elements] +	-2	*
-0.1 * [Number of Exemplary Claim Elements]	* [Number of Exemplary Claim Terms]	-4	*
		-4	*

**Calculate**

Caution: this takes about 1.5 minutes per 1000 patents

Patent Number	Title	Mapit Str.	User Str.	Total Claims	Indep. Claims	Cits	1st Cl. Terms	Ex-Cl. Terms	1st Cl. Ems	Ex-Cl. Ems
US 5,611,372	Arrangement of solenoid valves, a central plug and a printed circuit board on a control housing of an automatic shift device of a toothed-wheel variable-speed gearbox	42	-185	20	2	3	55	55	1	1
US 5,399,076	Process for determination of friction/slip characteristics of the tires of a road vehicle and slip control system for carrying out the process	-4	-378	10	1	0	96	96	1	1
US 5,601,057	Valve actuating system for a multicylinder internal combustion engine	8	-166	12	1	0	43	43	1	1

revised on Change Report: STATENET Non-Ex-Sem-Term A-67

**Figure 28**



MapInfoOutline - Netscape	
File Edit View Go Communicate Help	
<p> <b>US 4,434,876</b> Mercedes-Benz Do Brasil S/A</p>	<p><b>Pneumatic speed limiter for vehicles</b> Inventor Name: Filho, Angelo I. Application Date: August 26, 1981 • Issue Date: January 10, 1984 U.S. Class: 180/175 • Int. Class: B60K 031/00; F02 Claims: 13 • Ind. Claims: 2 • Cited Patents: 2 • Citing Patents: 4 1st Cl. Terms: 36 • Ex. Cl. Terms: 36 • 1st Cl. Elements: 0 • Ex. Cl. Elements: 0 Full Patent • Cited References • Citing Patents • Abstract • Claims • Image</p>
<p> <b>US 4,431,470</b> Mejia, Maria Mercedes</p>	<p><b>Multiple cell booster battery switch assembly</b> Inventor Name: Mejia, Santiago Application Date: October 14, 1983 • Issue Date: April 08, 1986 U.S. Class: 320/103 • Int. Class: H02J 007/00 Claims: 13 • Ind. Claims: 2 • Cited Patents: 2 • Citing Patents: 6 1st Cl. Terms: 35 • Ex. Cl. Terms: 35 • 1st Cl. Elements: 0 • Ex. Cl. Elements: 0 Full Patent • Cited References • Citing Patents • Abstract • Claims • Image</p>
<p> <b>US 4,738,735</b> Mercedes-Textiles Limited</p>	<p><b>Method and apparatus for continuously extruding an elastomeric material on the interior of a continuous tubular woven fabric in a loom</b> Inventor Name: Joncker, Helmut; McAlpine, Richard J. Application Date: November 05, 1986 • Issue Date: April 19, 1988 U.S. Class: 156/064 • Int. Class: B29D 023/00; B29 Claims: 4 • Ind. Claims: 2 • Cited Patents: 23 • Citing Patents: 6 1st Cl. Terms: 37 • Ex. Cl. Terms: 37 • 1st Cl. Elements: 4 • Ex. Cl. Elements: 4 Full Patent • Cited References • Citing Patents • Abstract • Claims • Image</p>
<p> <b>US 4,865,161</b> Mercedes-Benz Aktiengesellschaft</p>	<p><b>Connecting element for connecting a line to a component</b> Inventor Name: Koukal, Heinz; Merk, Helmut Application Date: June 30, 1988 • Issue Date: September 12, 1989 U.S. Class: 285/197 • Int. Class: F16L 041/08 Claims: 10 • Ind. Claims: 1 • Cited Patents: 10 • Citing Patents: 1 1st Cl. Terms: 55 • Ex. Cl. Terms: 55 • 1st Cl. Elements: 0 • Ex. Cl. Elements: 0 Full Patent • Cited References • Citing Patents • Abstract • Claims • Image</p>
<p>Copyright © 1999 Manning &amp; Napier Information Services All Rights Reserved. Version Release of August 12, 1999 Any unauthorized access, reproduction, or transmission of this page is strictly prohibited Patents per page 10 • View Patent • Date Format January 31, 1999 Search • Title • Year 01/31/1999 31/01/1999 January 31, 1999</p>	
<p>MANNING &amp; NAPIER INFORMATION SERVICES</p>	
<p>Document Done</p>	

Figure 29

*Focus Patent: US 3,989,193 • Device for varying the gas exit area of an exhaust nozzle for a jet deflecting device • Motoren- und Turbinen-Union München GmbH M.A.N. Maybach Mercedes-Benz*

# Device for varying the gas exit area of an exhaust nozzle for a jet deflecting device

Inventor Name: **Vedova, Ralph; Jabs, Alfred**  
 Application Date: February 24, 1975 • Issue Date: November 02, 1978  
 U.S. Class: **239/285 350 • Int. Class: B64C 015/04; B64**  
 Claims: 9 • Ind. Claims: 2 • Cited Patents: 6 • Citing Patents: 7  
 1st Cl. Terms: 63 • Ex Cl. Terms: 63 • 1st Cl. Elements: 1 • Ex Cl. Elements: 1  
 Full Patent • Cited References • Citing Patents • Abstract • Claims • Inade

### Device for varying the gas exit area of an exhaust nozzle for a jet deflecting device

Inventor Name: Enderle, Heinrich, Jabs, Alfred  
Application Date: February 28, 1975 • Issue Date: November 02, 1976  
U.S. Class: **239/265** 350 • Int. Class: B64C 015/08  
Ind. Claims: 11 • Dep. Claims: 4 • Cited Patents: 6 • Citing Patents: 2  
1st Cl. Terms: 33 • Ex Cl. Terms: 33 • 1st Cl. Elements: 1  
Cited References: Citing Patents • Abstract • Claims • Image  
Full Patent • Cited References • Citing Patents • Abstract • Claims • Image

## Shaft coupling

Inventor Name: Stegherr, Rudolf; Ruecker, Gerhard  
Application Date: July 22, 1975 • Issue Date: August 23, 1977  
J S Class: 464/177 • Int Class: F16D 003/24  
Claims: 7 • Ind Claims: 1 • Cited Patents: 5 • Citing Patents: 2  
1st Cl Terms: 40 • Ex Cl Terms: 40 • 1st Cl Elements: 0 • Ex Cl Elements: 0  
Full Patent • Cited References • Citing Patents • Abstract • Claims • Image

## Thermodynamic prime mover with heat exchanger

**Inventor:** Name: Kappler, Guenter; Fehler, Adolf  
**Application Date:** September 08, 1975 • **Issue Date:** September 27, 1977  
**US Class:** 060/039-511 • **Int. Class:** F02C 007/10; F02  
**Ind. Claims:** 2 • **Cited Patents:** 9 • **Citing Patents:** 3  
**1st Cl. Terms:** 43 • **Ex. Cl. Elements:** 1 • **Ex Cl. Elements:** 1  
**Null Patent:** Cited References: • **Claim Patents:** Abstract: • **Claims:** • **Means**

**Figure 30**



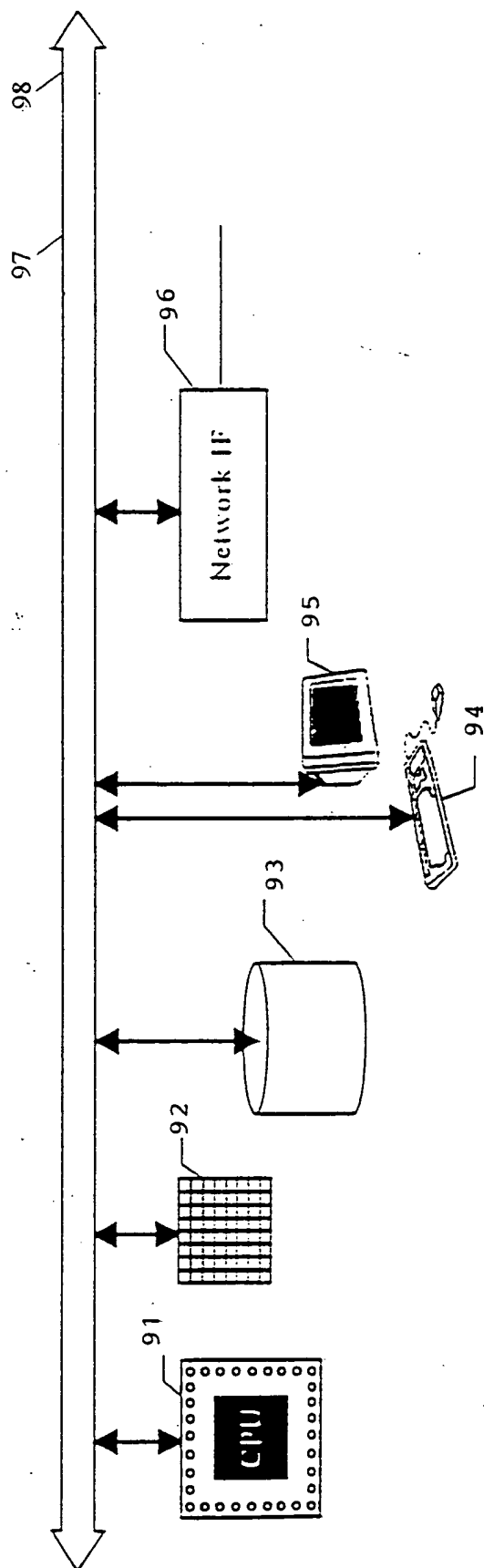


FIGURE 32